

HOYA NEW



**Dr. Friedrich Richard Rudolph
Schlechter**

Dr. Schlechter was born the 16 of October 1872 in Berlin, Germany. He was the third of six children. His father Hugo Schlechter was a Prussian lithographer working in Berlin, Germany. Dr. Schlechter lived 53 years, dying on the 16 of November 1925 in Berlin. Dr. Schlechter was a gardener, botanist, plant explorer, administrator, family man, and author, among other accomplishments. His areas of expertise are comprehensive and include Asclepiadaceae and Orchidaceae.

Oh There he is !
A pdf publication devoted to the Genus
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Contents

When a species is collected from the wild, I feel it is wise to identify it, propagate it and name it. In this way it will eventually get it into commercial channels, be distributed to all those interested in this genus and thus be preserved. If in the future the species is lost through natural causes or forest destruction it will still be here on earth in your collection.

The following new species are presented in PDF format with ISSN number. Check posting on my website "<http://hoyardk.wix.com/Kloppenburg>" under publications.

1. **Hoya taywanensis** Kloppenburg, Mendoza & Ferreras.
2. **Hoya odorata subsp miquilingensis** Kloppenburg
3. **Hoya miquilingensis** Kloppenburg

Hoya taywanensis Kloppenburg, Mendoza & Ferreras 2018

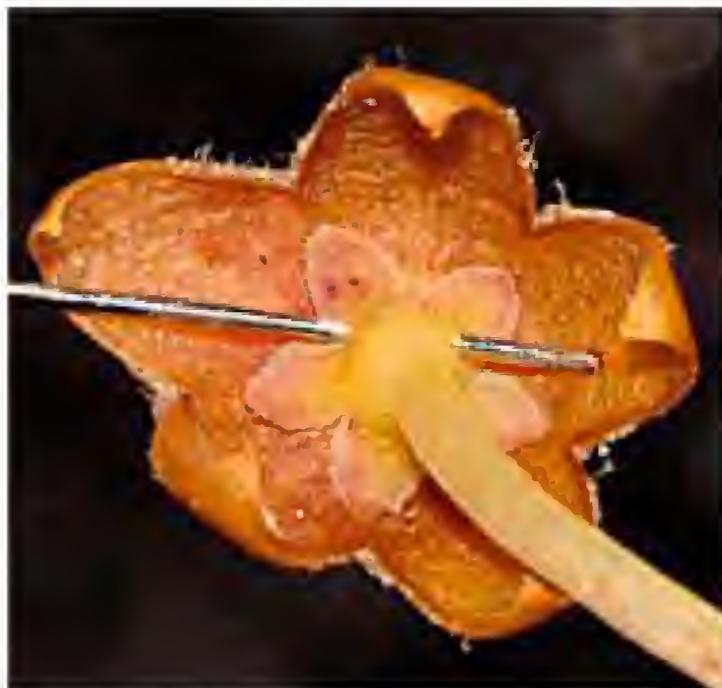
Hoya taywanensis Kloppenburg, Mendoza & Ferreras sp nova, holotypus 14685 PUH hic designatus. Section Otostemma (Blume) Miquel, similes *Hoya obscura* (Elmer) C. M. Burton 1986 sed folia plus uniformis et pavvior; pedicilli longior 1.2– 1.7 cm contrastre 0.5-1.5 cm, corolla et corona parviora 0.18 cm x 0.06 cm vs. 0.2 cm x 0.1 cm. Pollinaria differt. This new species was collected by George Mendoza et al at Mt. Taywanis, Quezon Province, Luzon, Philippines. Altitude 450 m. asl, Otostemma sp. Collection number, GM #204.



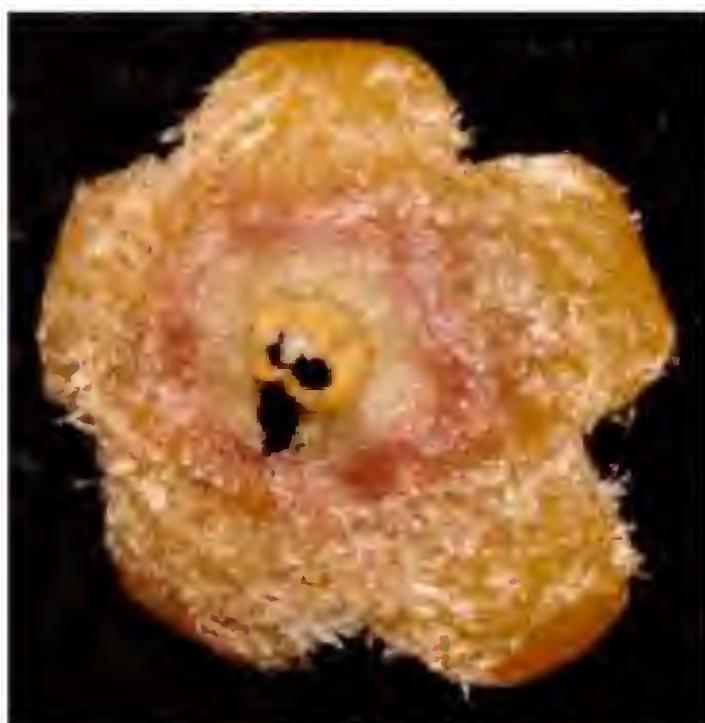
Pedicel: with calyx attached enlarged ca. 50x, The pedicels are curved, terete, glabrous, of various lengths 1.4 -1.8 cm long and 0.03 cm in diameter. Calyx base shortly bulbous.

Calyx: sepals are oval, glabrous-finely granulate outside, slick glabrous inside, apices are obtuse, no ligules observed. 0.09 cm long and 0.05 cm at the widest, basal overlap small to about 1.4.

Ovaries: are dome shaped (dark when preserved) glabrous 0.09 cm long and base pair 0.04 cm wide. Apices with circular modifications.



Corolla: ventral surface with the pedicel and calyx attached enlarged ca. 26x, the sepals do not come near reaching the corolla sinuses, This surface is glabrous and finely and evenly granulate. At anthesis it is revolute.



Corolla: dorsal surface enlarged as above. The center surface is granulate with a pentagonal raised surface surrounding it, outward it is hirsute-pubescent except the apical ends are glabrous and turned under.

Sinus – sinus	0.18 cm
Sinus – center	0.20 cm
Sinus – apex	0.26 cm
Apex – center	0.40 cm
Widest	0.20 cm



Corona: the ventral surface an *Otostemma* species with a skirt. Lobed at the sinuses, coronal lobes with the typical central keel, broadening as it proceeds inward.

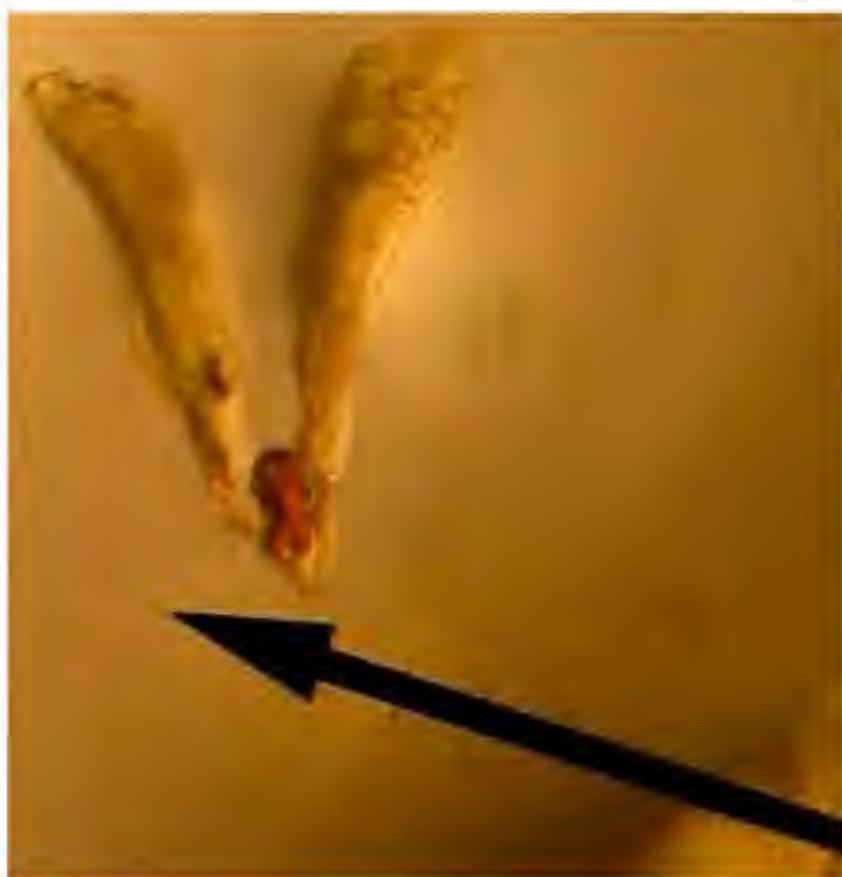


Flower: side view showing the relationships of the parts and their shapes. Note the inner coronal lobes exceed the central white anthers and also the outer lobes



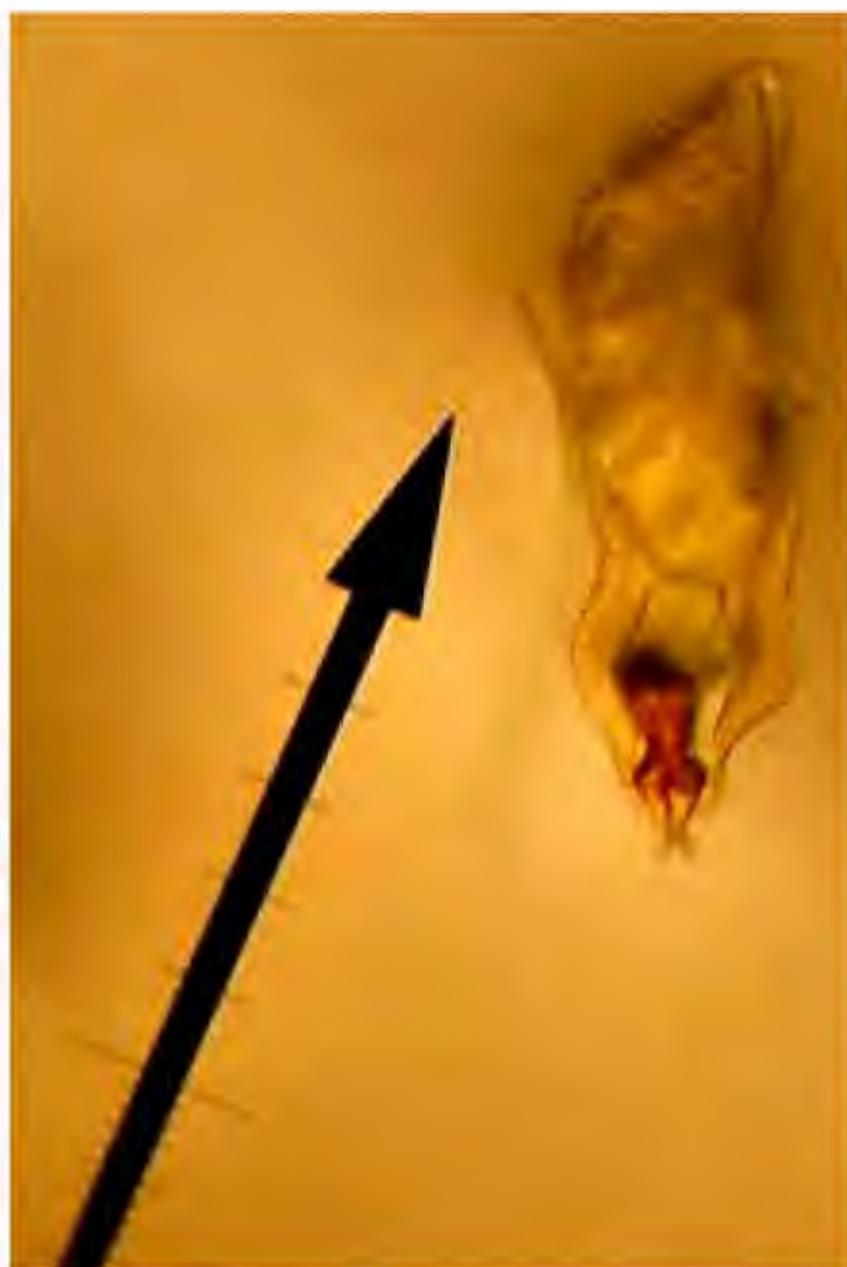
Corona: dorsal surface enlarged as above. Outer lobe apices are from sub-obtuse to sub acute. Surfaces glabrous.

Apex – apex	0.16 cm
Apex – center	0.18 cm
Widest (dorsal)	0.06 cm
Ret. – ret./center	0.04 cm
Aw. – aw./center	0.09 cm



Pollinarium left photo enlarged 90x. the left photo enlarged 170x.

This is the most difficult pollinarium I have ever worked with, difficult to extract. Measurements taken from the rt. picture.



Pollinium

length	0.25 mm
widest	0.11 mm

Translator

length	0.13 mm
widest	0.03 mm

Retinaculum

length	0.07 mm
shoulder	0.04 mm
waist	0.02 mm
hip	0.04 mm
ext.	0.03 mm

Caudicle

cw bulb	0.05 x 0.06 deep.
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Translator/caudicle type: lb/cw.

Leaves: opposite, petiolate, glabrous, ovate-elliptic base sub-ovate, apex acute, pinnate nervation slightly lighter green than the dorsal surface, not visible on ventral surface, about 5 pairs of nerves at 45° to the midrib.

Leaf measurement: in centimeters

Petiole length: 1.2-1.7

	length	width	petiole length
1.	12.8	3.6	1.7
2.	11.2	3.6	1.5
3.	8.0	3.5	1.0
4.	7.5	3.2	1.3
5.	4.8	2.0	1.2
Range	4.8-12.8	2.0-3.6	1.0 -1.7

More photos from living material taken by George Mendoza. About 36 flowers per cluster.



Contributors:

Ulysses Ferreras, botanist, plant collector, plant taxonomist.

George Mendoza, Landscape Artist, Nurseryman and Plant Explorer from Quezon City, Philippines, visit his web site www.forest-treasures.com.

Dale Kloppenburg retired: Graduate UC Berkeley in Plant Genetics, Lt. USNR, Plant Breeder and Research Agronomist, now taxonomist of Genus Hoya.

Hoya odorata subsp. miquilingensis Kloppenburg 2018

Hoya odorata subsp. miquilingensis Kloppenburg, holotypus 19258 (CAHUP) hic designatus. Collected by B. F. Harriail 20 Oct. 1968, Mt. Miquiling on summit of peak two. Elevation 1114 meters. Flower white, leaf very small. Roll 89. ; floribus in umbellis paucifloris albis, odoratis, pedicellis filiformibus, tenuibus, glabris 0.16 cm longis vs. circ. 2 cm longis in specienis; calycis segmentis lanceolato-oblongis obtusis, margine sparsim ciliatis, vs. 0.2 cm longis; corolla rotata, circ. 1.8 cm diametente vs. 1.7 cm diametente in speciebus, usque infra medium 5-lobata, extus glabra intus dimidio inferiore subinconspicue farinoso-papillosa, lobis ovato-triangulis acutis vel subacuminatis; coronae lobi alta ascendens misissti dorsi interiore oblonga spatulato vs. foliolis carnosus horizontalibus obovatis, apice anteriore acuta breviter adscendente in specienis. Among other differences.

Details follow in English:

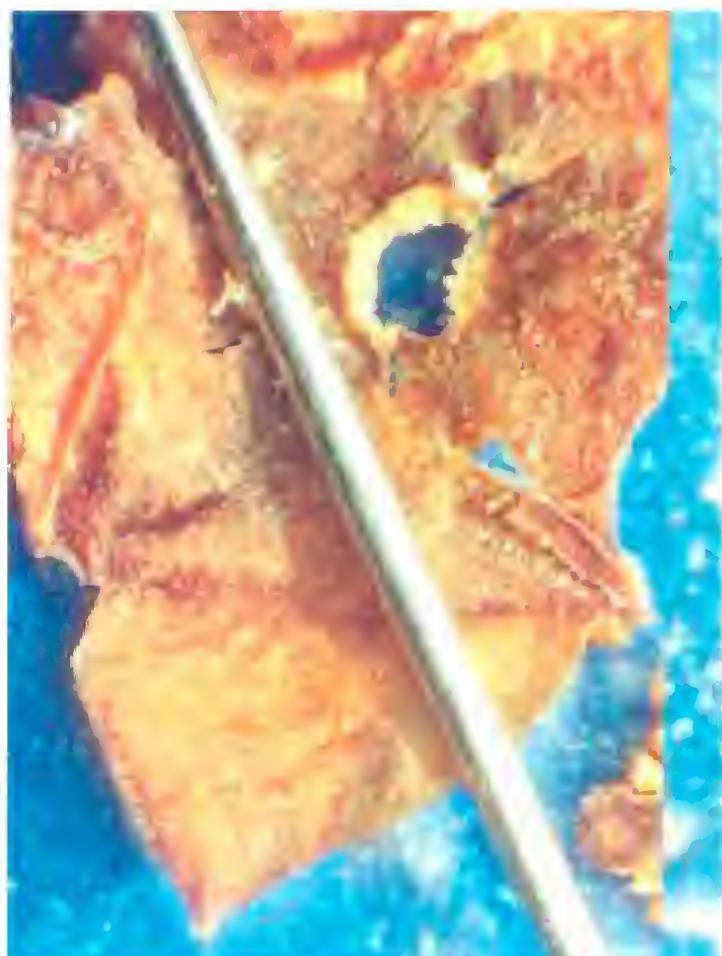


Pedicel calyx and ovaries side view. Enlarged about 8x.

Pedicel: 1.9 cm long 0.06 cm in diameter. Surface with sparse pubescence enlarging toward the calyx.

Calyx: sepals triangular, 0.16 cm long and widest 0.16 cm edge with a few cilia, edges hyaline, Inside glabrous and slick., no overlap at base, no ligules observed.

Ovaries: very stubby 0.11 cm tall and abase pair 0.16 cm wide.



Inside surface of the corolla, this surface is pubescent. Lobe apex acute, broad in the center.

Sinus – sinus	0.55 cm
Apex – center	0.90 cm
Widest	0.60 cm



Corona. Inner lobes raised and spatulate, dorsal surface cupped, outer lobe obtuse, anther wings with ends thickened and extending a little beyond the sinuses.

Apex – apex	0.60 cm
Widest	0.24 cm



Side view of a coronal scale. Anther right above developing into the thickened yellow wing below. Scale thin even when soaked in Kew solution, Inner lobe long and narrow, outer lobe with rounded apical area less so. Anther wing very thick at the apical, lower area.



Pollinium	
length	0.51 mm
widest	0.21 mm

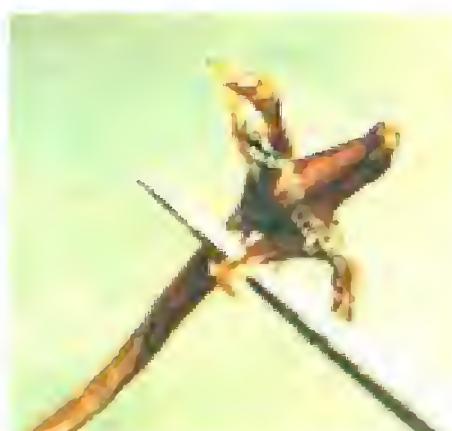
Retinaculum	
length	0.19 mm
shoulder	0.12 mm
waist	0.08 mm
hip	0.10 mm
ext.	0.05 mm

Translators	
length	0.10 mm
widest	0.04 mm

Hoya miquilingensis Kloppenburg 2018

Hoya miquilingensis Kloppenburg sp. nova, holotypus 18041 (UC) hic designatus. Collected on Mt. Miquiling, Philippines, June-July 1917. This new species is similar to *Hoya paziae* Kloppenburg 1990 with the narrow sepals and darkened corona but with a completely different pollinaria type and other structural measurements. Although the type sheet was labeled *H. odorata* it is certainly not that species.

The species on this herbarium sheet is not the same as the one on the (BO sheet of the same number. The two pollinaria are very different.



Pedicel, calyx and ovaries side view. Enlarged about 8x

Pedicel: 3.5 cm long, glabrous, uniform diameter until just below the calyx where it is larger.

Calyx: sepals pointed 0.2 cm long and 0.09 at the widest. Diameter 0.50 cm

Ovaries: narrowly columnar, 0.15 cm tall and 0.09 wide at pair base.



Inside view of flower enlarged about 8x. Corona as dark colored, corolla lighter. Anther wings prominent and thick at apex, anthers exposed in the center. Corolla outside glabrous inside ciliate pubescent.

Apex – center	0.87 cm
Widest	0.68 cm



Pollinarium enlarged about 165x. Inner pollinium ends rounded, Pellucid edge extends all the way to the base, Retinaculum with long narrow rounded head and nearly the same width all the way down, translators connected well down.

Pollinium

length	0.92 mm
widest	0.29 mm

Retinaculum

length	0.44 mm
widest	0.17 mm
extensions	0.04 mm

This specimen is like (UC) #13176 and maybe (UC) # 29638 and (UC) # 13860.



A complete pollinarium expanded to the size of the above picture. This shows the typical retinaculum of this species. Translators attached well down on the retinaculum.

Translator Type: p/o

Caudicle bulb: G
(granulate)

Retinacula (elongate)